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ABSTRACT

A study evaluated the effectiveness of the Templates for Literacy manual, which is designed to help the adult beginning reader integrate computer and literacy learning. The manual contains guidelines and strategies for incorporating word processing, spreadsheet, database, and graphics software into literacy curricula. The draft manual was pilot-tested for 18 weeks in three adult learning programs in New York City; Salem, Oregon; and Weirton, West Virginia. Data were collected through site visits. Limitations of the study include the fact that methods for determining student learning varied among the sites, and pre- and posttest data were not always available. The following results are reported: (1) tutors and teachers were enthusiastic about the manual as a tool for helping to teach low-level literacy students; (2) almost all instructors limited their teaching to the word processing templates, with very few students attempting database templates and no one using spreadsheets or graphics; (3) students were highly motivated by using the computer and reported that the templates helped them improve their reading and writing; (4) students at all reading levels learned computer skills by using the templates; and (5) there was evidence at all sites that having an opportunity to work with computers was very desirable and a motivating force in recruiting students as well as tutors. (The document contains three case studies, interview guides, a reporting form, questionnaires, and photocopies of photographs showing the manual being used.) (CML)

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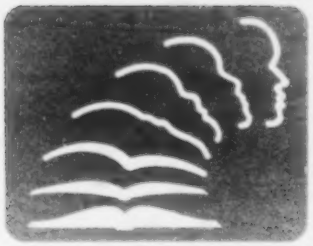

INSTITUTE FOR THE STUDY OF ADULT LITERACY

TEMPLATES FOR LITERACY
Manual Evaluation

Final Report

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TEMPLATES FOR LITERACY
Manual Evaluation

Introduction

The purpose of this report is to describe the results of an evaluation study of the Templates For Literacy manual. The Templates For Literacy project was designed to help the adult beginning reader integrate computer and literacy learning. The project grew out of Playing To Win's experience introducing computers and computer tools to adult learners enrolled in local community literacy programs. The Template manual was planned to enhance the student's ability to make use of the computer as a tool both within and beyond the learning environment.

Templates for Literacy is a manual of guidelines and strategies for incorporating word processing, spreadsheet, data base and graphics software into literacy curricula. This manual is text-based and applicable to any brand of hardware and software. It is designed to assist teachers and tutors in using computers in adult basic education literacy programs. Specifically, the goals of the project materials are to:

1. increase the motivation, attitudes, and skills of literacy teachers and tutors in computer use and adoption.
2. help teachers and tutors use computer business applications in teaching basic literacy skills.
3. improve attitudes and skills of adult learners in use of computer business applications as they acquire basic literacy skills in reading and writing.

The purpose of the evaluation study was to determine the impact of the manual, to assess the extent to which the objectives were accomplished and to provide information for final editing of the manual prior to publication. More specifically, the evaluation was intended to answer the following questions:

1. How useful is the manual in improving attitudes and skills of teacher and tutors?
2. How effective is the use of the computer templates in the manual in helping adult students learn computer and basic literacy skills?
3. What are the results of using the manual's approach on computer templates for student retention, attendance, and program recruitment?

Field Test of Manual

To make sure the Templates For Literacy manual is useful in a wide variety of settings, the draft manual was pilot tested with a variety of students and instructors. *Playing to Win*, which sponsored the Templates project, selected three adult learning programs as pilot test sites for Templates For Literacy. These sites were chosen to provide a representative sample of adult students by geographic area and reading needs. A stipend of $1,000 was given to each participating site.

Instructors using the manual were expected to do so without additional training from Playing To Win. The reactions, suggestions, and criticisms of teachers and students were intended to enrich the content and help insure the appropriateness of the final product. The pilot test required 18 weeks and was evaluated by an outside consultant.

The pilot test required that a participating program enroll adults 16 years or older and that there be three or more participation hours per week. Programs could be class based or organized by tutors. The goal was to begin with sufficient students at the 0-2.5 reading levels so as to have 15 students at the completion of the 18 week period. Students were expected to use the computer at least 15 minutes per student hour. A set of blank discs were provided for student and instructor use. Word processing and data base software were required with spreadsheet software being desirable. A printer was also needed.

Program implementation was planned to run from October 17, 1988 through March 10, 1989, with a minimum of 48 template/computer sessions. Because of delays in starting time, field testing was not completed until the middle of April, 1989. Instructors were to use the templates they prepared in advance either from the draft manual or from their own knowledge of the student's needs. After each session, instructor and student were expected to complete a short template evaluation form to be sent to *Playing to Win*. *Playing to Win* staff checked informally with the site program directors every two weeks.

Evaluation Design

Sources of Data

At the beginning of the evaluation study, the evaluator communicated with *Playing to Win* staff and program managers at the three sites to agree on questions to be answered by the evaluation and the roles and responsibilities of each party in carrying out the evaluation. Sites were asked to provide data about computer hardware and software available to them, the number and kinds of teachers and tutors, the methods of instruction used, and data currently being collected on students. Electronic communication was available for two of the three sites: The New York City and Salem, Oregon sites were on AppleLink, which facilitated communication with the Institute for the Study of Adult Literacy at Penn State. (Weirton, West Virginia site was not on that electronic network.) Numerous phone calls were conducted with the three sites and the *Playing to Win* staff primarily to determine the progress of the program and to request data.

The sources of information were teachers and tutors, adult students, program managers, and records maintained at the sites. The original plan was to collect all data by mail, electronic network, or telephone. Several instruments were designed to be administered by the program manager or instructors at each site. Major difficulties were encountered using this methodology. Midway through the evaluation study, in obtaining the needed evaluation data, additional funding was provided to make two-day site visits. These site visits were made in April, 1989, near the end of the test period.

Methods

The following methods were used to collect data to answer the three main questions of this project:

1. How useful is the manual in improving attitudes and skills of teachers?

The original plan was to collect data from instructors to obtain their reactions to the Templates manual. This method yielded a limited amount of data. Teachers and tutors were asked how the manual was used, how they liked it, and what changes they would suggest. They were also asked templates they used and their evaluation of them. Teachers and tutors were asked to keep a weekly log describing how they used the manual, how they integrated it into their instruction, and how the manual helped with their teaching. Unfortunately, the log was seldom used. Data were collected from instructors during the site visits near the end of the testing period. Most evidence about

effectiveness of the manual in improving attitudes and skills of instructors was collected during these site visits. A copy of the instruments used are in Appendix B.

2. How effective is the use of the computer templates in the manual in helping students learn computer skills and basic literacy skills?

Data were collected at the beginning and end of the field testing from the students to measure their attitudes toward and knowledge of using computers. Teachers administered this questionnaire at the sites. Two sites did not administer these instruments at the end. Students were also personally interviewed about their experiences in using the computer templates, how they felt about them, and what applications they used. Each site used a different method for measuring student growth in basic literacy skills. Whatever measures were used in a literacy program provided evidence of change among students. Control groups were used in two sites. One site did not have data available

3. What is the result of using the manual's approach on computer templates for student retention, attendance, and program recruitment?

Teachers, tutors, and program managers provided information about recruitment and attendance of students from records they maintained. In personal interviews, students were asked about the influence of using templates and the computer in recruitment and retention.

Limitations of the Evaluation

Major difficulties were encountered in obtaining data and evidence from the 3 sites throughout the progress of the pilot program. In some cases pre and post data were not provided for measuring student attitudes and knowledge and for student growth. Sites used different tests for measuring growth within as well as between so that comparisons were impossible. Few forms for evaluating templates were completed. Logs were rarely maintained. Volunteer tutors give low priority to completing paper work for reports. Program managers were overburdened with requirements for delivery of literacy programs so that providing evaluative data became a conflict. Adult students pose special difficulties in providing evaluative data. At the same time, the attitudes and interests of the staff, managers, and tutors were extremely cooperative and positive about this evaluative project. The site visits were crucial in obtaining data for evaluation. In order to alleviate some difficulties with data collection, a preliminary draft of the evaluation report was reviewed and critiqued by program managers at the three sites.

Summary and Conclusions

Templates for Literacy is a manual designed to help the beginning adult reader integrate computer and literacy learning. It contains guidelines for creating activities that reinforce literacy learning while introducing specific computer skills in word processing, spreadsheet, database, and graphics. It is a resource for integrating computer use with literacy instruction. The manual was field tested at three sites. This report is an evaluation of the results from using the manual at New York City, Weirton, W. Va., and Salem, Oregon.

The field testing took place during an 18 week period in the winter and spring of 1988-89. Forty eight sessions were included in the program. It was originally intended to collect evaluative information and data by impersonal methods, namely, electronic network, mail, and telephone. It soon became evident that these methods would not yield the data we needed for formative and summative evaluation of the manual. Approximately at the midpoint of the project, resources were provided for site visits by the evaluators. This method was much more successful in obtaining the needed evidence and data, but we still encountered difficulties in obtaining some of the data for which we had originally planned. Program managers reported that volunteers do not give priority to completing reports. Tests for measuring student growth differed from one site to the other. Although we were somewhat disappointed with the amount of quantitative evidence obtained, we feel confident that adequate evidence was obtained to answer the questions about the manual and to arrive at recommendations. The evaluation design focused on the following three questions:

1. How useful is the manual for improving attitudes and skills of instructors.

Tutors and teachers were enthusiastic about the manual as a tool for helping to teach low level literacy students. They found the exercises easy to use. By use of the template exercises the lowest level student could gain skills in use of the computer. Tutors varied in the extent to which they selected and prepared templates for integration into their instruction. Teachers and tutors gave several examples of integrating computer use into literacy education. Tutors generally depended on the professional teachers for assistance with preparing the templates on discs and for integrating the educational curriculum with the computer activities. Instructors selected templates which relate to daily activities and real world of the students.

Instructors varied in how much of the manual they found helpful. Most concentrated on the appendix, the exercises. Several did not

read the complete text. Almost all instructors limited their teaching to the word processing templates. Very few students attempted database templates and no one used spreadsheets or graphics. All sites are continuing to use the manual after the project requirements were met. Other adult students and tutors at the sites became interested in using the templates.

Tutors were usually given limited training in use of the manual; professional teachers with some computer experience trained themselves in use of the manual. They reported it relatively easy to use but several needed considerable time in learning the templates and designing the use of the computer as part of their teaching. Teachers became more proficient over time. Tutors generally depended upon a professional teacher to provide leadership for using the templates.

2. How effective is the use of the computer templates in the manual in helping students learn computer and literacy skills?

Students were highly motivated by using the computer. They enjoyed the experience of using the templates from the manual. They depended upon the instructor to show them what templates to use. A few progressed to the level at which they could adapt a few of the templates although that was rare. Students of all reading levels learned computer skills by using the templates. Students reacted to their overall experiences in using computers. They could not isolate the template exercises from their computer experiences. Students demonstrated pride and an increase in self esteem as well as a sense of empowerment as a result of the skills they developed in using the computer. They wanted more time on the computer. They said the templates helped them improve their reading and writing, and at the same time they mastered minimum skills in using the computer, especially elementary skills in word processing.

Several students felt their gains in computer skills were helpful in getting a job. In two sites, test scores showed a gain in literacy skills. In one site the templates' students showed higher gains than a control group which included half who used computers and half who did not. In the other site the findings were ambiguous in that the control group who all used computers also showed gains similar to the templates group.

3. What is the result of using the manual's approach on computer templates for student retention, attendance, and program recruitment?

There was evidence at all sites that having an opportunity to work with computers was very desirable and a motivating force in recruiting students as well as tutors. Students reported their friends would like

similar experiences. Most students said the computer kept them coming to class and interested in the lessons. Only in New York did students say they would attend even without the computer. In no case did students or tutors drop out because of the computer. Students who dropped out did so because of extraneous causes. It was impossible to separate the influence of the manual as an intervening variable separate from the computer; the two are inextricably interrelated in the teaching and learning functions.

In conclusion, teachers, tutors, and adult students had positive attitudes about use of the templates manual and demonstrated gains in developing computer skills. There is considerable evidence that the use of templates had a positive impact on students by increasing their literacy skills. The manual was effective in student retention, attendance, and program recruitment. The manual is usable in present form by teachers and tutors who are computer literate and who have some knowledge of basic literacy skills. Those who do not have these skills in computers and basic literacy would need a minimum amount of training in computer and literacy skills and could benefit from simplified directions in use of the templates. All three sites are continuing to use the manual even after termination of the testing period indicating favorable adoption of the templates manual by teachers and tutors. The templates manual is a valuable teaching tool for literacy providers. It meets a pervasive need for improving the workplace literacy skills in contemporary society.

RECOMMENDATIONS

Manual

Content of manual

The appendix included only word processing templates. Several suggestions are in order if adult students are to use database and spreadsheet applications. Simple illustrations and examples should be included in the narrative. The appendix should include several templates which tutors and teachers can use with students. Illustrations are needed which relate to the everyday experiences of the students. Perhaps use of graphics would help students understand and develop skills in using database and spreadsheet functions. Many words in the manual may be simplified.

Sections in the manual might suggest how to use the templates with special populations, especially ESL, learning disabled, and other special needs populations. Templates could be prepared for ESL students with built in grammar for job skills and study skills. The manual might also address the need to have a record system built in to identify student activities and their progress. For example, one new student used a previous student's disc so that the templates used by the previous student had to be replaced with no record maintained as to where the first student was.

Format of manual

The manual could be designed to permit ease of using it as a teaching tool for the tutor and student while working at the computer. One tutor suggested a spiral bound manual at the one end so the manual could be used at the computer. Several suggestions were received on editing the manual, for example, numbering all the pages.

Additional components to enhance usability of manual

Training

Tutors expressed the need for a simplified manual to train them in use of the templates. They want a set of procedures on how to use the templates. The design for a tutor training workshop is needed. Tutors needed more than the basic computer workshop to use the templates on their own.

Suggestions are needed on how to integrate the templates into the basic literacy instruction. Teachers and tutor also needed help with this task.

Software

Since much time and effort were required by tutors and teachers to format discs for students, consideration should be given to putting the templates on discs for marketing.

Suggestions for improving evaluation of similar projects

At the end of the evaluation program managers gave a suggestion for improving data collection by using tape recording equipment for the tutors and teachers. Suggested criteria for measuring attainment of the manual objectives included improvement in writing and computer skills. Visits to the sites prior to data collection would have increased chances of follow through with data collection according to the original plans. Additional telephone and electronic mail contacts may have increased collection of needed data. Sharing the evaluation plans and data collection forms with teachers, tutors, and managers might have resulted in additional data on student growth.

Appendix A: CASE STUDY 1
Salem, Oregon

Facilities

This pilot project was conducted at Chemeketa Community College in Salem, Oregon. This College has been innovative in computer technology with support from the administration and staff. The state helps with funding for literacy. The college has a comprehensive set of services and programs in literacy education.

The manual was pilot tested in the English as a Second Language (ESL) program of the Developmental Education Department of the college. The ESL program started using computers this year. The software for ESL students included grammar master, mystery sentences, and ESL picture graphics. The students in the ESL program are primarily Hispanic and from Southeast Asia.

The $1,000 given to the college for testing the manual was used to upgrade computer equipment. The college has several computer labs with Apple computers, IBM's, etc. They purchased Appleworks software to use the Templates materials in the Templates project. The computer lab could accommodate 16 students. Each student was provided with a disc.

Literacy program

Chemeketa College has an elaborate Developmental Education Department which provides services and programs to assist students in developing and improving academic and personal skills. Programs include ABE, GED, ESL, ENL, Adult High School Diploma, Alternative High School, and Developmental Education Credit Classes. Services are available for deaf, hearing impaired, and visually impaired students. In small groups or one to one, volunteer tutors help students with reading, writing, math, pronunciation vocabulary and English as a Second Language. Enrollment in the ESL program was slightly over 2,000.

Staff

There is a cooperative effort among staff with support from the administration to test and implement new programs. The staff was very supportive of the Templates project. The staff received training on implementing this pilot project and continued to meet weekly to plan strategies.

The staff included a program manager, volunteer professional teacher, volunteer tutors, and student tutors. The professional teacher spent 50 hours on her own time preparing to become computer literate and familiar with the Templates manual. This teacher made up the templates on discs before class. Although the templates are self-explanatory, tutors usually talked through the template with the student. Records were kept on student's progress and attendance.

Students

The 16 students in the Templates project were learning computer plus English skills. Students were pre- and post-tested on understanding of parts of speech. It was not difficult to recruit students for this program. In fact, there was a waiting list. The students met twice a week for 1 1/2 hours. With five tutors in the class and approximately one to two students for each tutor, each student had about 30 minutes of computer time each class period. Because extra time was spent putting the templates on discs and selecting templates for individual students, time was lost in getting started.

The results of this pilot project demonstrated that the students were very enthusiastic about working with the computers. Although they did not have adequate language skills to get a job, two students passed the state competency test on computers. There were no dropouts from the project due to the manual or the computers. No student actually completed as many as 48 templates. Students used templates on cursor control, inserts and space bar. Students learned computer skills and reinforced vocabulary. The middle level students saw that they could control computer materials. The lower level students benefited from seeing something in print that they produced.

Tutors' attitudes and knowledge of computers

Five tutors filled out a test to measure knowledge of and attitudes toward computers before the program. The average attitude score was 2.8 with the maximum possible being 7.0; for a measure of knowledge of computer functions it was 4.2 out of a possible 7.0; and for knowledge of computer components the average was 5 out of a possible 5. No post-test data were available.

Adult Students' attitudes and knowledge of computers

Thirteen students completed the attitude and knowledge test. At the beginning,of the program, the attitude score was 6.0 out of a possible 7, much higher than for the tutors. For knowledge of computer

functions the average was 2.5 out of a possible 7.0, and for components of a computer it was 3.8 out of a possible 5.0. No post-test data were available.

Measuring student growth

The literacy program used three different tests for the primary purpose of placement. They are "Fruit", a locally developed test; EPT, an English placement test; and STEL, a structure test for the English language. Fruit was used with levels 1 and 2, EPT with level 3, and STEL with level 4. These test scores were used to measure gain in literacy for 15 adults in the Templates for Literacy group and for 22 adults in the control group. For the Template group, 11 were in the 2nd or 3rd levels and 4 in the 4th level so that all three tests were used to measure gain in literacy skills. All except one student showed a positive gain. Those taking the fruit test gained an average of 8 points where the maximum score possible was 36. The 10 who took the STEL test gained an average of 7.2 points with the maximum possible being 50. Since control students were in varying levels and took varying tests, it was possible to match only three in the treatment group with 7 in the control group who took the Fruit test. The average gain was 8 for the 3 students in the Templates group and 11 for the 7 in the control group.

It is hazardous to draw any conclusions from these data since there are so few cases and the Templates group were tested over a shorter time period than the control.

Anecdotal evidence was provided for the one student who did not show improvement in standardized testing: "He has come diligently to every session and has been so proud of his work. He can now type the alphabet. This means that he has now learned the alphabet and can now find the letters on the keyboard. He used the templates to put the alphabet in correct order. In computer skills, he can move names, delete and use the space bar. He can put the disc in himself. He can look at a template and type it into the computer. His biggest breakthrough came when he was able to type his name and the children's names into the computer. . . . When he printed these out and took them home and the children picked out their names, he was very proud. . . . He feels less like a first grader and more like an adult."

Teachers comments included:

- student is doing very well
- too much changing of discs
- student is getting more comfortable with the computer
- she is learning to work with English as well as computer skills
- he wants to learn as much as possible
- student completed 3 templates today
- student was very alert and interested

- beginning student had a sense of pride when he could see the letter as a printout
- very good student who learns very fast
- he pays attention to every detail
- used the computer with difficulty at first and felt pride when completed work

Reactions to manual by tutors

Thirteen template evaluation forms were completed by tutors and students. This represent a very small proportion of the potential forms which could have been filled out. The templates used were those pertaining to insert, using the delete key, erasing double word, insert his and her, erase alphas, family insert, erase drugs, insert an and erase not same. One student completed 3 templates in one lesson. The manual was used by the instructors as a "guideline". Templates were viewed as the most useful part of the manual. Most tutors did not read the manual thoroughly. They had studied selected sections, beginning usually with the appendix. The tutors were enthusiastic about using the manual in teaching with the computers. The tutors saw the Templates manual as a new concept to teach literacy and computer skills together. Students seem to feel they are getting only computer skills.

Recommendations from Salem, Oregon site

Tutors gave several examples of need for editing the manual. Since considerable effort and time were used in preparing discs, tutors felt it would be better if templates were already on a hard disc. They also felt they needed more examples and Templates for database and spreadsheets. Some tutors would like templates for ESL students with grammar for job and study skills and on U.S. history. Tutors cited a need for more preparation time to optimally use the manual. They also saw a need for a specialist to help teachers or tutors with curriculum integration. Tutors may be interested in a simplified manual which contains primarily the templates.

CASE STUDY 2
New York City

Facilities

The pilot project met in the Casita Maria community building at 55 East 102 St., New York City. The classroom was very comfortable with a capacity for about 20 students. The class was set up in discussion form. Visuals in the room illustrated parts of the computer.

Literacy program

The community was almost entirely Spanish speaking and all classes were conducted in Spanish. The total literacy program had 55 students. There were 12 students in the Templates class. The purpose of the Templates literacy program was to teach Spanish literacy, not English. Students were at the 0-3 grade levels. .The class used a workbook using several themes. It was written for a Latin American audience.

The computer lab was a rather large classroom with 16 Macintosh Plus computers and two Apple IIe's, plus two printers. Each student had a computer and their own disc. They used the Spanish version of MacWrite as the software package.

Staff

The staff member who is in charge of the pilot program is from nearby Hunter College. Serving on the advisory committee to *Playing to Win*, he saw the Templates program as an opportunity to do research on literacy. The professional teacher of the class was given a computer to use at home to practice using the templates. He had had experience in using computers for word processing. He was given the manual to use as he chose with his class. This teacher designed the templates in Spanish, using the ideas but not the content from the manual. He selected the templates which related to the curriculum being taught. The computer room was staffed with the teacher and two lab assistants.

Students

The 12 students in the Templates class were all female ranging in age from 29 to 72. These students received 1 to 1-1/2 hours each week on the computers. Prior to the computer experience, the students had 1 1/2 hours of class instruction.

Adult students' attitudes and knowledge of computers

The students want to learn how to read and write; the computer provided extra motivation. Students said they would have attended classes even if they did not have the opportunity to use computers. They liked using the computer very much; it enhanced their self-esteem. They saw it as a functional activity. They enjoyed telling their family that they worked at a computer.

Students completed pre- and post-tests on attitude about and knowledge of computers. Of the 13 students who took the pre-test, only 7 completed the post-test. The average attitude score was 6.1 at pre-test and 6.3 at post-test indicating a very favorable attitude at the beginning as well as end since the maximum score was 7. For the knowledge test on computer parts, the average score was 3.9 at pre-test and 5.0 (maximum score) at post-test indicating growth in knowledge of computers. The set of questions about computer functions was administered as a pre-test only. .The average score was 1.6 out of a possible 5.0. Outside the class experience, no student had any experience with the computer at the beginning or the end. Only one student had a family member who had used a computer.

Adult student growth

Since the staff will not perform post-testing on the Template students until June, 1989, no quantitative data were available on student growth. Qualitative changes in students included an increase in feelings of control and enhanced self-esteem.

Reactions to Templates manual

Only fourteen template evaluation reports were completed by the students and teacher. All except one student felt the template exercises were easy to use and good. They found them very interesting. Some said the exercises helped them learn to read and write better. One student felt computer use would be difficult, but found it otherwise. Another reported progress in getting to know the computer. Another learned to write her name and address. One student felt it was more efficient to write by hand, the only negative evidence cited. The teacher said the manual can be used by a literacy educator with a minimum level of computer skills. The class has used only word processing activities, not database or spreadsheets.

Recommendations from New York City site

Manual should be offered in Spanish.
Math illustrations would be helpful.

CASE STUDY 3
Weirton, West Virginia

Facilities

The Weirton literacy program which began in 1977 is organized within the Weir Public Library in Weirton, West Virginia. In 1984 an Appalachian Regional Commission grant of $115,000 was used to establish a computer center for the literacy program. A federal grant was provided to develop a video on strategies for establishing a literacy program using volunteer tutors. This effort helped get literacy programs started in the tri-state area in which the program leader serves in a consulting role. Hence, the program has built a track record in using computers to teach literacy.

The literacy program covers two counties with three libraries serving as tutoring sites. The library is financed by 80% from the city funds and 20% from the state and United Way funds. The literacy program offers a basic 3 hour workshop on computers, provides periodic inservice on new materials, and has the assistance of a supporting Literacy council, and other support staff in the library. The literacy organization has an advisory board and publishes a newsletter.

Literacy program

Laubach materials serve as the curriculum content. Apple 2E computers are located in the library. The software package used for the templates project was Appleworks. Radio Shack computers are available but were not used in the Template project. The software library has over 350 software programs for literacy education.

Staff

The literacy program has one full time and one part time staff who are paid through the library. Most teaching is done by volunteer tutors using a one-on-one approach. There are now 68 tutor student teams in the Weirton literacy program. In the past 11 years 395 tutors have been trained and 588 students have been enrolled. The Templates pilot project began with a project manager and 12 tutors (7 tutors at the end of the program). While most tutors worked with only one student, two tutors and the project manager worked with 10 of the 16 students. The pilot program began in late October, 1988 and requirements were completed by the middle of April 1989. Tutors are continuing to use the Templates manual.

The project manager attempted to introduce the manual to tutors by a workshop, but due to transportation difficulties only two attended. The project manager then introduced the manual to each tutor individually and explained how to format discs, make copies and do the word processing exercises in the appendix. The manager had taught classes on computers for several years and trained herself in using the template manual.

The tutors were more apprehensive about computers than the students, but became more interested after having some experience with them. Tutors had the responsibility of integrating templates with the literacy lessons.

Adult Students

The pilot project began with 19 students; 16 completed the program of which 6 were female and 10 male. The three dropouts moved out of the geographic area. Students were recruited through the computer workshops and the newsletter. Students met twice a week for 1-1 1/2 hours. At each meeting students spent 15-30 minutes working on templates on the computer. Several students worked on the computer alone; the software was available for them to use as they desired.

Students were very much interested in the computers. Students in the pilot project were judged by the instructors to be more interested in literacy education than the other adult students. Only one student was reported to have anxiety about using computers. None of the students has a computer at home.

Templates, or exercises, used most often were: cursor control with numbers; garbage screen; insert of his and her; making compound words; return with a food list; insert a word story, completing sentence; mouse control with shift; and, insert-caps. All were a part of word processing. No one worked on spreadsheets. Five students were reported to have worked on databases, but very little.

Adult students' attitudes and knowledge of computers

Fifteen students completed the attitude and knowledge survey at the beginning. Only six of these students completed the survey at the end so that change could be measured for only these six. The average attitude score increased from 5.5 to 6.5 with 7.0 being the highest possible score. Average knowledge score about computer functions increased from 2.0 to 4.3 with 5.0 being the maximum possible. Average knowledge scores about computer components increased from 2.6 to 5.0. the highest possible score. Except for the computer experience in the pilot project, students reported no other opportunities for computer use.

The computers were a positive influence in keeping students in the program. Students felt the computer experience gave them marketable skills. They wanted more time on computers. Students reported an increase in their feelings of self-esteem. One student was reported as getting a job because of his computer experience.

Adult student growth

Growth of students was measured by reading levels according to Laubach skill levels. The change in reading levels for the adult students in the Template's group was compared to a control group of adult students who were in the literacy program during the same period of time. The control group was systematically selected by taking every 10th student from a total of 150. For the 15 students in the Templates group, the average reading level increased from 1.5 to 2.8. For the control group, the increase was from 1.7 to 2.1. Hence, the average growth in reading level for the Templates students was 1.3 and for the control group 0.3. About half of the control group used computers. All students in the Templates group increased in reading level while only 7 out of 15 in the control group showed an increase.

Tutors reactions to the Templates manual

The overall reaction of the 7 tutors to the manual was very or quite favorable. No one expressed a negative reaction. They felt it was easy to understand and follow instructions and it had good ideas for helping students. They said the manual would be very helpful to them as a teacher and that it was very helpful in integrating computer use with literacy instruction. They rated the word processing computer activities as very valuable but were not sure about the value of database and spreadsheet activities. Tutors felt students understood the template activities very well. They said the students all developed skills in using templates some quicker than others. Before the Template project, students could use computers only if they were above the 2nd reading level. With the Templates manual, students at the lower skill levels used the computer. Tutors suggested a need for simple examples on spreadsheets, numbering of pages, and reduction in size of the manual.

Recommendations from Weirton, West Virginia site

Database templates need to be simplified for lower level learner and more examples would help interest students in spreadsheets. Simplify some of the wording in the manual. Adapt the format of the manual with a spiral binding at the top to permit students and tutor to use it at the computer. .

Appendix B: Instruments

Interview Guide for Adult Students
Templates for Literacy
Salem, Oregon
April 24, 1989

1. Name

2. How often have you yourself used the computer in this program?

3. How do you feel about using the computer? Why do you feel this way?

4. What have you learned about using the computer in this program?

5. Has the computer helped you to improve reading and writing skills? If yes, how?

6. How do you feel your computer skills will help you?

7. What templates have you used or developed in this program?

8. Has working with the computer made your lessons any more interesting? If so, how?

9.Has using the computer kept you from dropping out of the program?

10. Would using the computer keep your friends interested in similar lessons?

11. Have you tried to get any of your friends to take this program? If so, what did they say or do?

12. Compared with how well you did before, did using the computer help you learn any better? Why?

13. How could your lessons using the computer have been more helpful to you?

14 . Would you like to learn more about using the computer? Why? What do you want more of?

15. Did you have any experience with the computer before these lessons? If yes, what?

16. Do you have any immediate plans for the future? If yes , what?

17. Personal characteristics:
    Sex :
    Race:
    Age:
    Employment Status :

Interview Guide for Tutors
Templates for Literacy
Salem, Oregon
April 24, 1989

1. Name:

2. Please describe your student(s) and how you work with them.

3. What experiences have you had in working with computers?What computer skills do you have?

4. What experience have you had with the "Templates for Literacy Manual"?

5. Please describe the training you had to use the manual?How did that training help you in using the manual?

6.How have you used the manual in your teaching?

7.What parts of the manual have been most useful? Least useful.?

8. Please describe the student(s) you work with in their experience in using computers .Also, describe their literacy level .

9. What progress have they made in using computers?

10. How did use of the computer help with maintaining student interest , attendance , and prevention of dropout?

11. How did the manual help students improve their reading skills?writing skills?

12. How many templates have your students developed or used ? Which ones have you found to be easy to teach and which ones more difficult?

13. Did the manual help you develop computer skills? If yes, in what way?

14. Has the manual helped you improve your teaching? If so, how?

15. The manual covers three major functions:word processing, data bases, and spreadsheets. About how much time in your teaching did you spend on each?

16. In which function did stucents develop more skills? Explain.

17. What suggestions do you have for improving the manual so as to make it more useful to tutors tutors like yourself?

Report of Template Use

Tutor/Teacher: Students: Indiv. Group

Name of Activity: Type of Activity: WP DB SS

Origin: Templates Manual Original (please attach copy)

Preparation Time:

Dates of use:

Computing Objective:

Literacy Objective:

Student Comments:

Tutor/Teacher Comments:

Include in Appendix: yes no

INSTRUCTOR'S REACTIONS TO "TEMPLATES FOR LITERACY" MANUAL

1. NAME:_____ DATE:_____

2. ORGANIZATION:_____

3. Are you a teacher?_____ A tutor?_____ An administrator?_____

4. Have you had training in use of the manual? YES NO
If YES, how?_____

5. How much of the manual was included in your training? (check all that apply)
_____ Using Templates to Create Activities (Part 1)
_____ Word processing (Part 2)
_____ Data bases (Part 3)
_____ Screadsheets (Part 4)
_____ Appendix

6. What is your overall reaction to the "Templates for Literacy" manual?
_____ very favorable
_____ quite favorable
_____ so-so
_____ not very favorable
_____ not favorable at all
Comments:

7. To what extent do you feel this manual will help you as a teacher/tutor?
_____ will be very helpful
_____ will be helpful
_____ don't know
_____ will not be of much help
_____ will not be helpful at all

8. To what extent do you feel this manual will help you integrate computer use with literacy instruction?
_____ will help very much
_____ will help some
_____ don't know
_____ will not be of much help
_____ will not be helpful at all

9. How valuable do you feel the three major computer activities covered in the manual will be in your teaching?

	very valuable	valuable	don't know	not valuable at all
A. Word Processing	_____	_____	_____	_____
B. Data Bases	_____	_____	_____	_____
C. Spreadsheets	_____	_____	_____	_____

10. Of how much help do you feel the manual processing templates in Appendix A will be?
_____ very much
_____ quite a bit
_____ don't know
_____ not much
_____ none

11. How well are you able to use and practice the templates illustrated in the manual?
_____ very well
_____ quite well
_____ so-so
_____ not very well
_____ not well at all
Comments:

12. Will your students be able to use the template lessons in the following computer activities:

Word Processing-	YES	NO	DON'T KNOW
Data Bases-	YES	NO	DON'T KNOW
Spread Sheets-	YES	NO	DON'T KNOW

13. Have you personally used a computer? YES NO

14. If YES, for what? Word processing?_____ Data bases?_____
Spread Sheet?_____

15. What software packages do you have for your students?

16. How would you rate your skills in using computers?
_____ very high
_____ average
_____ low
Comments:

17. What suggestions do you have for revising the manual to make it more useful as a resource for integrating computer use with literacy instruction?

Name: _____ Teacher: _____

Are you: Male: ____ Female: ____ Your age: ____

"Templates for Literacy"

ATTITUDES TOWARD COMPUTERS FOR READING AND WRITING INSTRUCTION

Circle yes or no next to each question:

YES NO 1. Is it important for you to learn how to use a computer for reading and writing?

YES NO 2. Does using a computer for reading and writing make you feel nervous or anxious?

YES NO 3. Does using a computer for reading and writing make other people think more highly of you?

YES NO 4. Can a computer help you to learn to write better?

YES NO 5. Do you feel sure of yourself in using a computer for reading and writing?

YES NO 6. Do you like using a computer for reading and writing?

YES NO 7. Do you wish you could use computers more often for lessons?

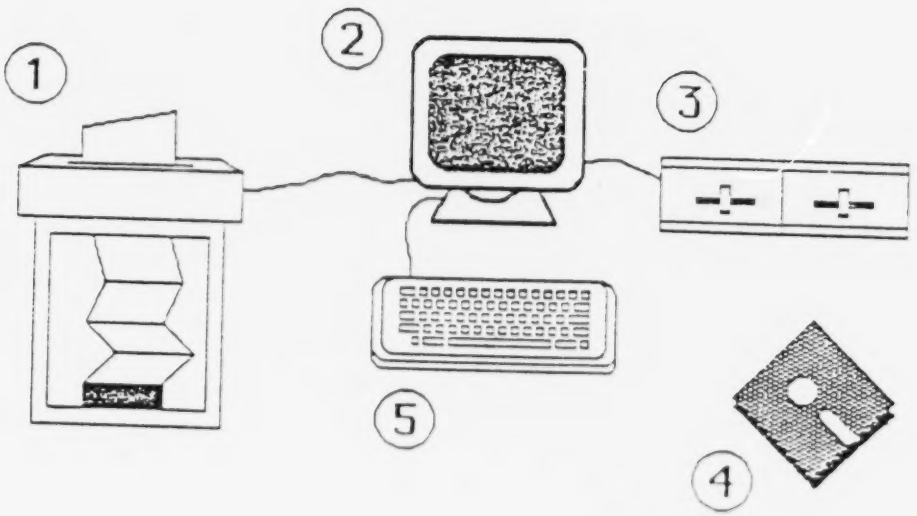
8. In the past month, how often have you used a computer for your instruction? _____

YES NO 9. Do you use a computer at work or at home?

YES NO 10. Does anyone else in your family use a computer?

11. Match the meaning of a word in the first column to the second column.

____ Hardware	1. Draws pictures
____ Software	2. Works with numbers
____ Word Processor	3. Program run on a computer
____ Spread Sheet	4. Keeps records of names
____ Data Base	5. Computer equipment
____ Graphics	6. Types stories
____ Template	7. Pattern or model



1. Which picture shows a keyboard? (Circle the correct one)

   1 2 3 4 5

2. Which picture shows a disk drive? (Circle the correct one)

   1 2 3 4 5

3. Which picture shows a display screen or monitor? (Circle the correct one)

   1 2 3 4 5

4. Which picture shows a floppy disk? (Circle the correct one)

   1 2 3 4 5

5. Which picture shows a printer? (Circle the correct one)

   1 2 3 4 5

INSTRUCTOR'S WEEKLY LOG
FOR USING "TEMPLATES FOR LITERACY" MANUAL

Organization: _____
Instructor: _____
Date Covered: _____

1. Please briefly describe the lesson(s) you taught.

2. Did you use the computer? YES NO
If yes, how?

3. Did the student(s) use the computer? YES NO
If yes, for what?

4. Did you use any templates from the manual? YES NO
If yes, which ones?

5. Did you develop any of your own? YES NO
If yes, for what purpose?

6. How well did the student(s) understand the lesson(s)?

7. How well did the student(s) develop skills in using the template(s) or other materials from the manual?

8. What suggestions do you have for improving the manual to make it more helpful to other teachers like yourself?

INFORMED CONSENT FORM
Penn State

Title of Investigation:Evaluation of Templates for Literacy Manual

Date: March 21,1989

I agree to help with a study which has been approved by The Pennsylvania State University .The study has been explained to me and I understand it. I have been given the opportunity to ask questions and they were answered to my satisfaction. I understand that I can refuse to answer any specific questions. I understand that my answers will remain confidential.

I understand that I am free to stop my participation at any time.

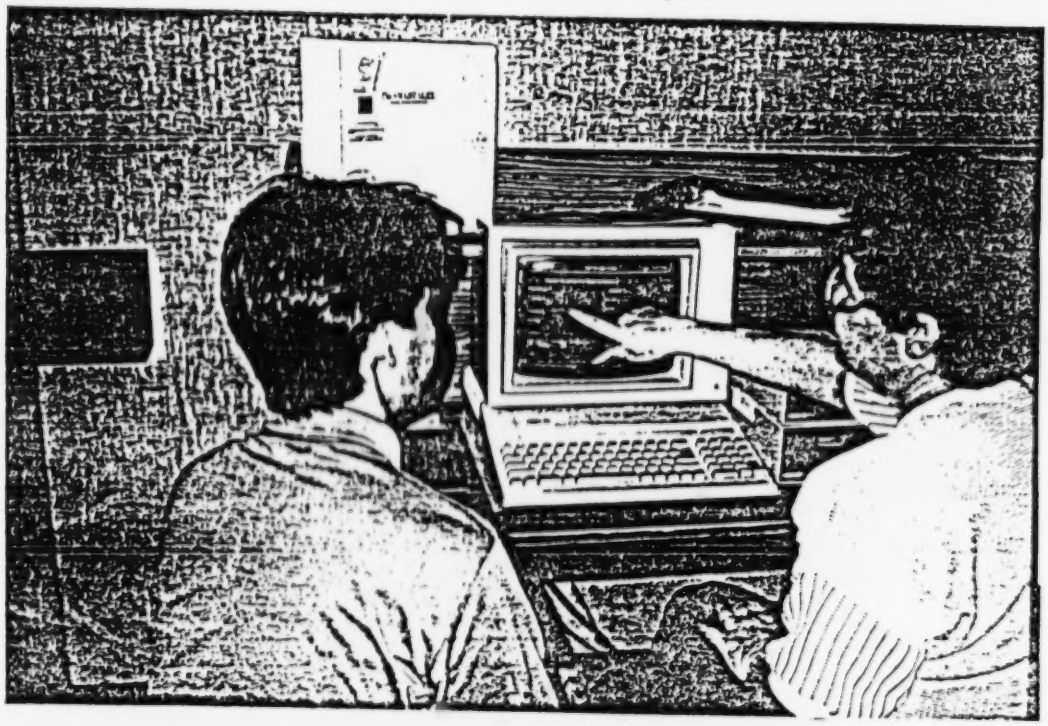
_____ Date :
Participant' signature

Appendix C: Photographs

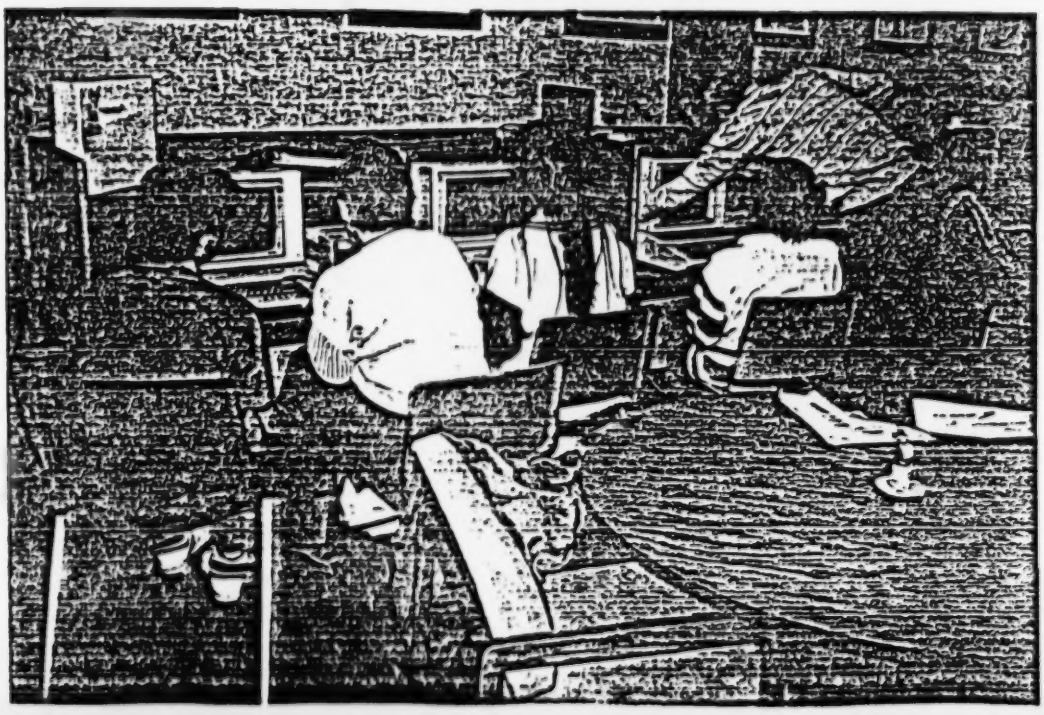
Salem, Oregon

Templates for Literacy Project

Tutor and student at the computer



Tutor and students at the computer

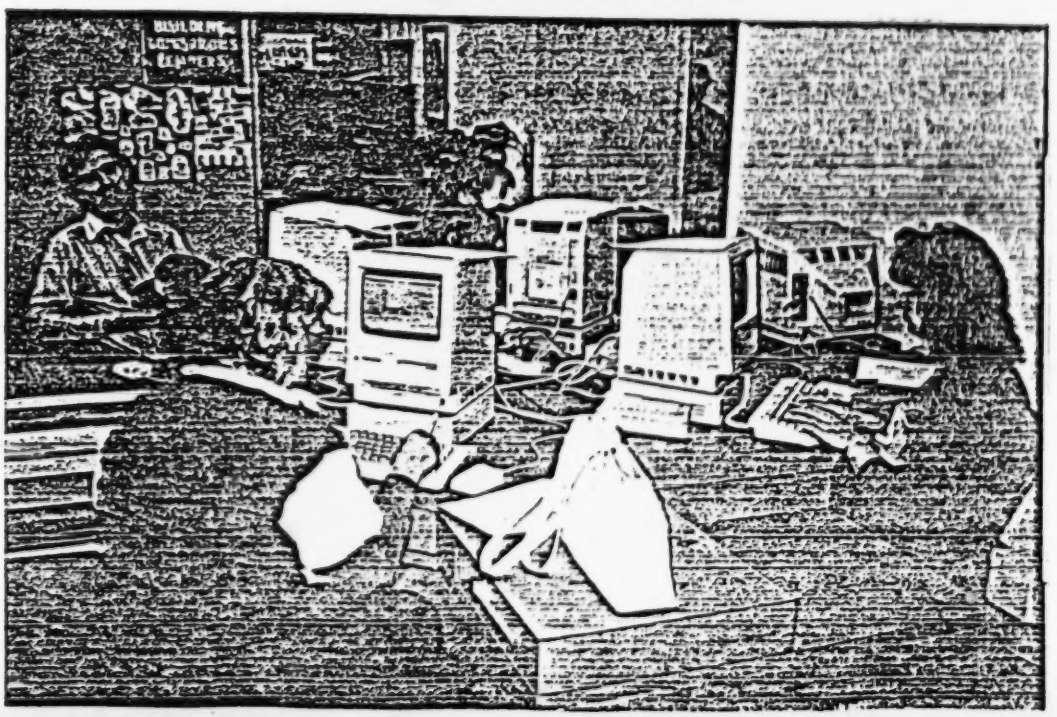


Salem, Oregon

Templates for Literacy Project

Students working at the computer

Tutors and students at the computer

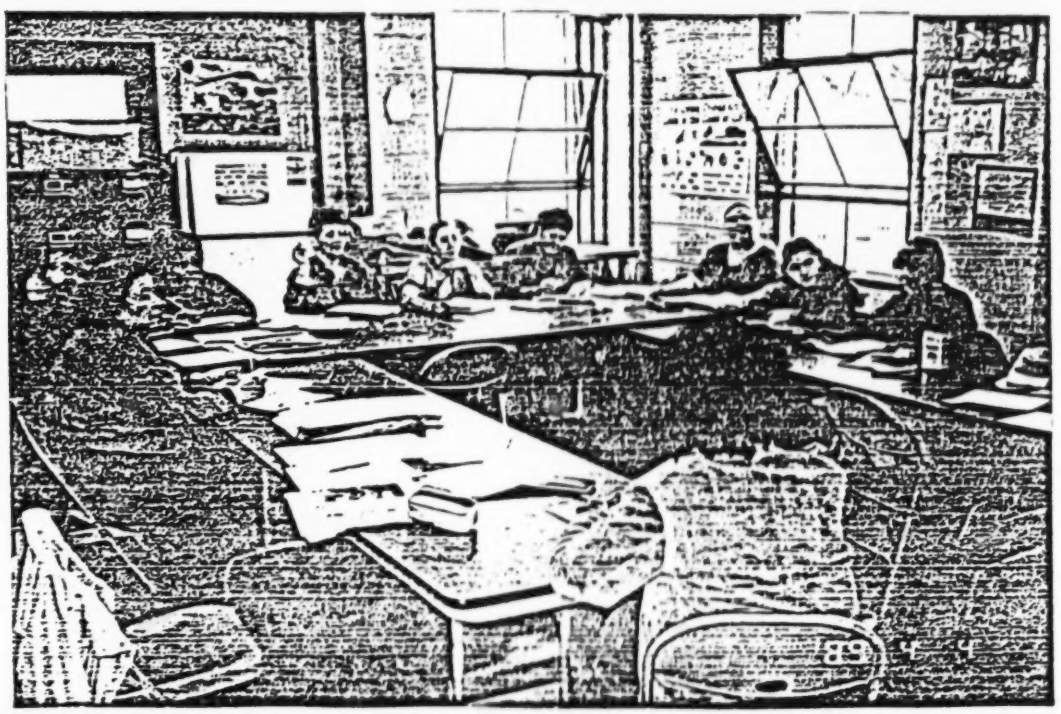


New York City

Templates for Literacy Project

Computer lab

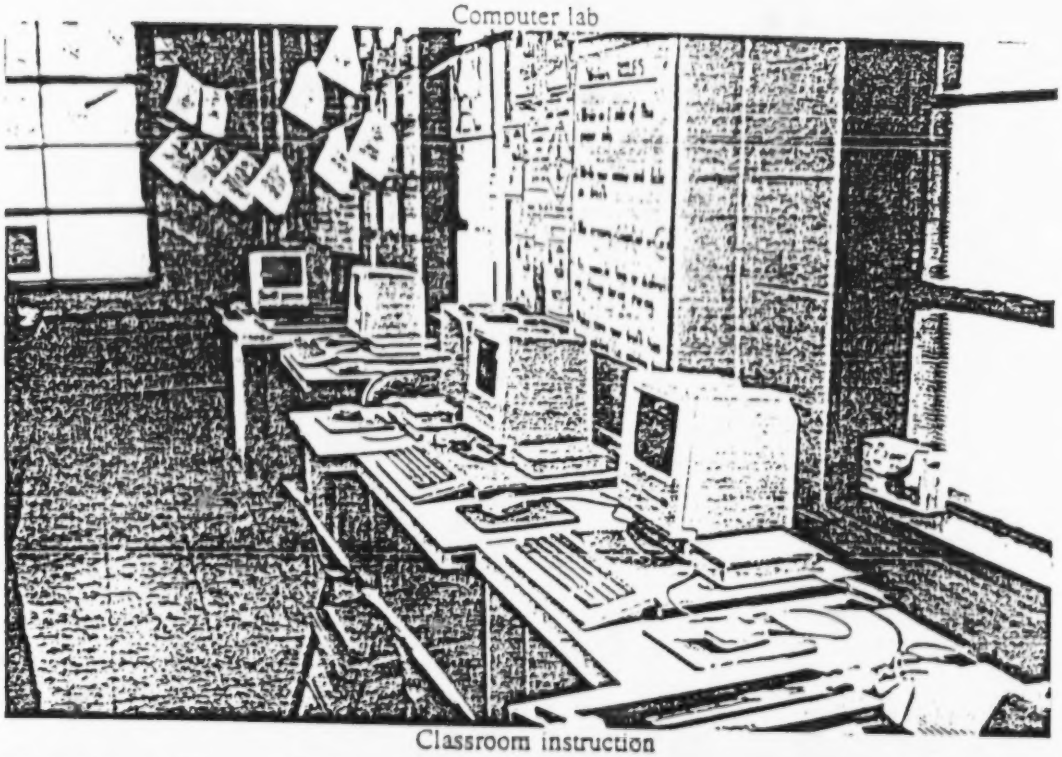
Classroom instruction



New York City

Templates for Literacy Project

Computer lab



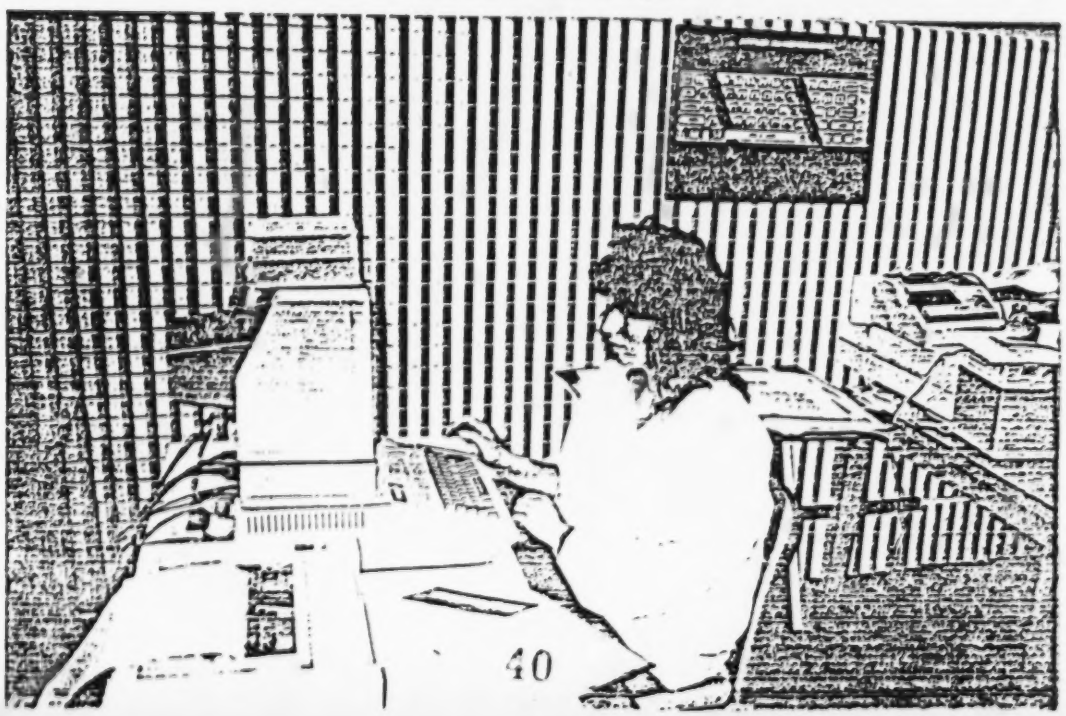
Classroom instruction

Weirton, West Virginia

Templates for Literacy Project

Tutor and student at the computer

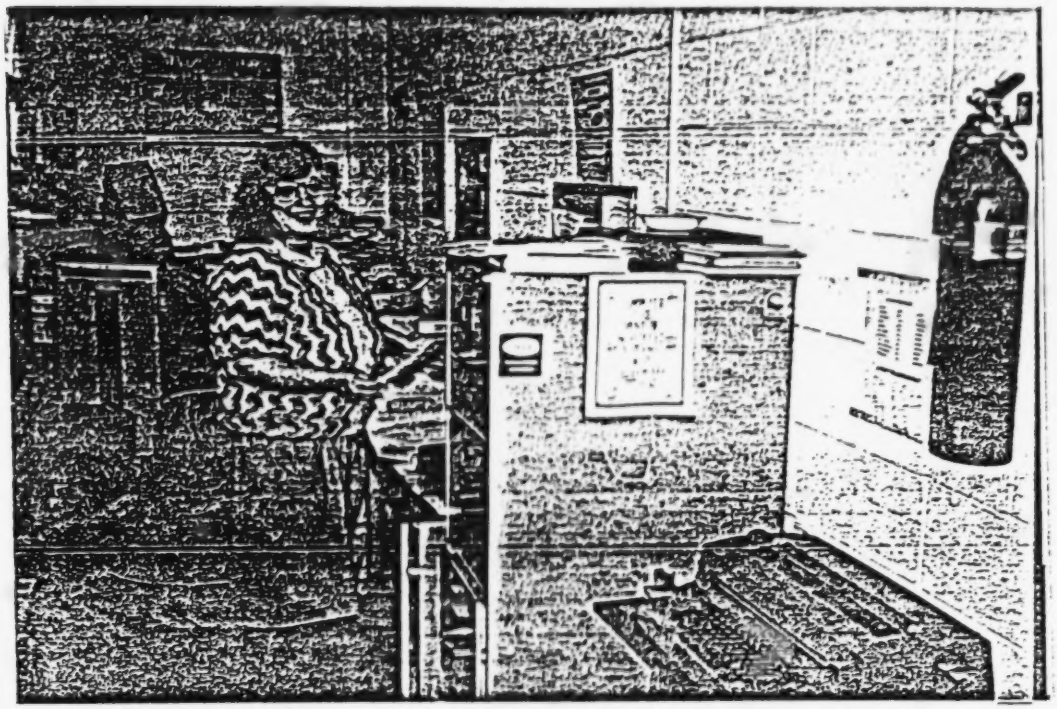
Student at the computer



Weirton, West Virginia

Templates for Literacy Project

Adult Literacy Program Manager



Tutor at the computer